# EXHIBIT 1

## THE CITY OF NEW YORK, ET AL v. EXXON MOBIL CORPORATION, ET AL

*VOLUME 2 August 4, 2009* 

TRIAL
SOUTHERN DISTRICT REPORTERS
500 PEARL STREET
NEW YORK., NY 10007
212-805-0300

Original File 9847citf.txt, Pages 256-417 (162)

[5]

[6]

[7]

[8]

[9]

[10]

[11]

[12]

[13]

[14]

[15]

[16]

[17]

[18]

1191

[20]

[21]

[22]

[23]

[24]

[25]

[1]

[2]

[3]

[4]

151

[6]

[7]

[8]

[9]

[10]

[11]

[12]

[13]

**[14]** 

[15]

[16]

[17]

[1]

121

131

[4]

[5]

171

[8]

[9]

[10]

[11]

[12]

[13]

[14]

[15]

[16]

[17]

[18]

[19]

[20]

[21]

[22]

[23]

[24]

[25]

Page 340

Page 342

**Q.** Could we look at document 122, please. Could you tell us what document 122 is?

A. That's a letter that was written to the New York State Department of Environmental Conservation requesting a reissuance of the permit, renewal of the permit, authored by me

MR. SACRIPANTI: Again, your Honor, just I note, I don't have that one either.

**THE COURT:** Well, you could have a continuing complaint, so to speak, about that. I don't know that you need to repeat it.

MR. SACRIPANTI: Okay. Thank you, your Honor. Q. Now, sir, are those your words there?

A. They are, and they were in response to questions that were raised by the State DEC as to what our intent was with regard to the wells, whether we intended to continue to utilize all the wells in their capacity.

Q. You said it is important to articulate the critical importance of maintaining the permitted water allocation from the Queens wells currently provided for in the Jamaica Water Supply permit. Why did you say that?

A. I think it's obvious that the fact that the well system, while it has the difficulties with the water quality, the fact that we own it outright, that it resides, it's the soul source of water that lies within the city's bounds that we control,

We've currently worked on and have gotten four out of those nine to a state of readiness. We've run water through them. We haven't tested the water for water quality yet.

That's the next phase.

In the beginning of July, we had notice to proceed, so we initiated a contract to be able to replace the carbon media, the GAC media to change that out to put in new media. That was done. Again, that contract was put into service, about \$800,000 was put into service in July of this year and there's a meeting scheduled in the near future to work with, I think it's Suffolk County to examine some of their facilities. So we're working along that line.

We've also done a lot of capital construction over the years going back even as far as my tenure at DEC from '96 to '98. When the City bought out Jamaica Water, we spent a lot of money now building, replacing old water mains, improving the infrastructure and bringing that up to modern terms.

MR. SACRIPANTI: Your Honor, I would just ask that we have some questions. These are narrative responses.

**THE COURT:** I don't see any problem with them myself. Go ahead, Mr. Chapman.

MR. CHAPMAN: Thank you.

**Q.** Now, you make a reference in the letter to DEP's current capital commitment and support of the State cleanup of the Westside Corporation site at Station 24. Our plan is to

Page 341

Page 343

want to be able to utilize that resource when and if necessary. Q. Now, you said the next paragraph, DEP has extended much effort to planning the rehabilitation reconditioning and modification if necessary of any and all existing facilities associated with the well system. What did that refer to, sir? A. When we purchased the -- there are a number of legacy -- there were a number of issues that came over with the system that we bought, including equipment that didn't work and wells that needed to be treated. We had a staff, I have a staff of roughly 40 to 50 people that is full-time engaged in that area. They work on doing everything from inspection of the equipment to make sure that it's not leaking, and right down to grounds keeping. We have to maintain all of the properties and they're associated with all the well stations and they're spread out throughout the borough.

make it pretty clear to me that it's a no-brainer that we would

We've, as part of a drought condition or a concern if we moved into a drought condition, in the early 2000's we had constructed a number of what we call, they're filter systems, granulated activated carbon systems, which we call them GAC systems. Basically, you run the water through them and it filters it. I guess the analogy would be, if you've ever had an aquarium with fish in them, you run the water through the carbon to clean the water up. So those systems were installed at nine of the wells.

accelerate the Station 6 treatment plant design and

construction. What was that reference to Station 6 there?

A. The reference to Station 6 there was with regard to the

design and construction of the plant at that facility, which is

in what we call conceptual design, about 10 percent design.

The Westside Corporation, we've worked with the State of New

York in getting that contract up and they are currently

managing that operation with the intent in the future that it

will be passed over to the City for future operations.

[10] Q. What is that reference to the Westside Corporation? What

is that project?

A. Station 24 is the cleanup of the PERC-contaminated site at

Station 24. Westside Corporation and Station 24, I think

[14] become synonymous in that context.

[15] **Q.** What is PERC?

[16] A. As it was described this morning. It's a chemical that's

typically used in dry cleaning or auto parts cleaning. It's a

[18] solvent.

Q. And the City is proceeding to clean up that site right now?

[20] A. Yes.

Q. Could we go to the next page, please? And is that a

reference, again, to the DEP's overall plan out in Jamaica,

Queens in Station 6?

[24] A. Yes.

Q. What is MGD?

Page 344

- A. That's just an abbreviation for millions of gallons per [1] day. It's the same as minutes and hours when you talk about [2]
- time. We talk about water in terms of million gallons, not 131
- typically gallons. [4]
- Q. So just for a reference, how many people would be serviced
- with 10 million gallons a day? 161
- A. Well, if you were to use as a rough estimate 100 gallons a [7]
- day per person, if each person used 100 gallons per day, you'd [8]
- have 100,000 people. F91
- Q. Now, is 100 gallons a day approximately what people [10] average? [11]
- A. I think our consumption is probably a little bit higher [12]
- than that. It's probably on the order of about 130. 120 to [13]
- 130 per person, so it's a little bit higher. But just from [14]
- round numbers, it gives you a sense of scale. [15]
- MR. CHAPMAN: Could we see the next page, please? [16]
- Q. And you wrote, "The renewal of the Jamaica well permit, [17]
- consistent with the pending application, is a high priority for [18]
- DEP." Was that a true statement at the time? [19]
- A. Yes, sir. [20]
- Q. Is it still a true statement? T211
- A. Yes, sir. [22]

[1]

[2]

- MR. CHAPMAN: Could we see the next exhibit, please? 1231
- Q. And did you receive a letter back from the State about your [24]
- request for the permit? [25]

- tunnels, the shortfall of a failure, the shortfall that would [1]
- be created by a failure on City Tunnel No. 2 alone would be [2]
- significantly, if not wholly made up by the supply, the volume [3]
- of supply if you could get the whole 68, 69 mgd out of that [4] system. [5]
- 161 Q. What does the term "system failure" mean to a water man such as yourself? [7]
- A. System failure could be any piece of the, our ability to [8]
- supply it. So it could be a failure of the tunnel, could be a [9]
- failure of a piece of the tunnel, it could be a failure of one [10] 1111
- of the distribution, one of the points where the tunnel exits the -- where the water comes up out of the tunnel and meets the [12]
- street. It could be, again, as I explained, because Queens is [13]
- heavily dependent on water mains to carry the large diameter [14] water mains to carry the water from the north to the south, a [15]
- failure of a major water main at the wrong spot, even worse, [16]
- but there are several large trunk mains that carry, that do a [17]
- lot of the work. Failure of any one of those pieces would be [18]
- considered a system failure. 1191
- Q. How big are the mains that service Queens to City Tunnel [20]
- No. 2? [21]
- A. The risers coming up out of City Tunnel No. 2 in Queens are 1221
- 72-inch. We've got trunk mains that are 72-inch and go down to [23]
- 60 and 48. The large diameter mains, mains that you can walk 1241
- in in some cases. [25]

Page 345

Page 347

- A. Yes. That's the copy or a copy of the letter from the state DEC.
- MR. CHAPMAN: This is PL 123 in evidence. Could we [3] see the next page, please? 141
- **Q.** And what is this second page that starts with "permit"? [5]
- A. Basically gives us the authorization to run the well system [6]
- that we had requested from them through the year 2017. 171
- [8] Q. So as of now, the City is authorized to use the entire well
- system now at Jamaica, Queens? [9]
- A. We're authorized to use it. F101
- Q. Now, sir, from your perspective, with regard to the City
- water system, is the groundwater in Jamaica, Queens important [12]
- to the New York City water system? [13]
- A. Well, again, as I stated a little earlier, the fact that it [14]
- is independent of the upstate watersheds, it's a separate [15]
- source. Unlike many of the other options that are being [16]
- studied with regard to making up shortfalls in terms of a major
- outage of some of the upstate infrastructure, it's something [18]
- [19] that we don't have to negotiate with whether it's another
- municipality or another township. It doesn't have the same [20]
- political strings that are attached to it because we own it, [21]
- and it's in our backyard. [22]
- And I think one of the things that probably gets 231 overlooked in the context of the Delaware aqueduct leak is the 141 fact that as we saw earlier on the map that showed the city

- Q. Sir, I'd like to show you a brief video clip, and could you [1] identify it for us, please? [2]
- A. That clip is showing news footage of a failure at shaft 10 [3]
- on City Tunnel No. 1 in 1989 at 135th Street in Manhattan. [4] That was 135th Street and St. Nicholas Avenue. As you can see, [5]
- that was uncontrolled water coming out of the tunnel. We were 161
- unable initially to get in to turn it off. There was a Parks [7]
- Department facility, a big promenade that was washed away. As [8]
- 191 you saw, the impact to the subway system and the surrounding
- area in determines of debris, the park was pretty much [10] [11]
  - decimated in that area.
- Up until, I guess somebody made a last-ditch effort to [12] get in there and do what we call trip the valve, but basically [13]
- shut the water off, they were coming very close to making the [14]
- decision to shut the entire system down at Hill View, which [15] would have knocked out the whole supply to Manhattan and into [16]
- Brooklyn. Would have had a very far-reaching effect. [17]
- [18] **Q.** How big was that main, sir?
- A. 36-inch diameter main. [19]
- Q. Now, you said, I believe, that the mains supplying Queens [20]
- were 72-inch? [21]
- [22] **A.** That's correct.
- Q. Now, from an engineering standpoint, does that mean it's 1231 twice as big or does it not work that way? [24]
- **A.** It's actually, because the area, it's a function of area, [25]

[1]

[2]

[3]

[4]

[5]

[6]

[7]

[8]

[9]

T101

[11]

[12]

T131

[14]

[15]

[16]

[17]

[19]

[20]

1211

[22]

[23]

[24]

[25]

[1]

[2]

[3]

[5]

[6]

171

181

[9]

[10]

[11]

[12]

[13]

T151

1161

[17]

[18]

[19]

[20]

[21]

[25]

[11

[2]

[3]

[4]

[5]

[6]

[7]

[8]

191

Page 348

so it's really four times. So a three foot to a six foot would really be, it's twice the diameter, but four times the volume.

Q. I'd like to show you another brief video. Let us know when

you've looked at it.

A. That is a news clip of a break in Maryland. It was about a year ago, maybe a little less than a year ago where they had a 66-inch diameter main that failed coming out of one of their treatment plants. It was pretty dramatic. They had people that were pulled out of those cars by helicopters --

**THE COURT:** Yes, Mr. Sacripanti?

MR. SACRIPANTI: I've never seen this before.

THE COURT: They were supposed to show their exhibits. MR. CHAPMAN: We showed it to them yesterday.

**THE COURT:** To a different attorney?

MR. CHAPMAN: Yes, last night.

**THE COURT:** We'll discuss it during the break. They showed it to a different attorney.

MR. SACRIPANTI: We don't have the background.
THE COURT: A lot of attorneys are on your team. If he showed it to a different attorney, you'll have to check during a break to make sure that's right.

[22] Q. You said that was a 66-inch break?

[23] A. That's right.

Q. And that's still not as big as the Queens main, right?

A. No. One of the things that made that of interest to people

Ridge, Brooklyn into Staten Island, they were in turn replaced with the Richmond tunnel, and now the siphons provide redundancy to the Richmond tunnel.

We're currently working with the Port Authority and the Corps of Engineers to build a new tunnel to replace the old siphons again to replace that same level of redundancy. Anything we do with water mains in the street, redundancy is just, it's a backup plan so that you don't get yourself into a situation, as with shaft 10. I think if you were to watch more of the video that came from the news reports, you would find that as calamitous as that was, the immediate area was not affected. The water supply to that area wasn't affected because we have a level of redundancy in our system that allows us to grapple with those types of things.

MR. CHAPMAN: Could we see PL 186, please? Q. Sir, are you familiar with PL 186, which is in evidence?

A. The drought management plan.

[18] Q. What is that?

A. In simplest terms, it's a plan that deals with increasing levels of drought as they occur, as the watershed upstate is not, being as the Catskill Delaware system is not being refurbished by rain water due to lack of rain, there are a series of steps from a watch to a warning to emergency with its different phases that go from everything to public outreach, advising the public to conserve water to forcing the public to

Page 349

Page 351

Page 350

around the country that collaborate on a twice a year basis. One of the things, you're interested in what the material was, what type of pipe was it that broke, that gave way, and in that case it was what they call, it was reinforced concrete, it was precast concrete pipe which we use very little of in our system but almost, as the videos were coming up, I was getting e-mails from municipalities around the country, everybody asking essentially the same question, what type of pipe was it.

like myself, there's a collective group of municipal engineers

Q. So did you say earlier, sir, that the full capacity out of the Queens groundwater system could replace a break in the case of that 72-inch failure?

A. If not entirely, in significant portion, and our ability to, to use the expression, keep the area wet, to be able to supply water, would clearly be better off with that system than we would be without it. That seems to be common sense.

Q. Now, sir, you used the term redundancy earlier in regards

to planning. What do you mean by that from a water engineering standpoint?

A. Redundancy is basically having alternatives. So City
Tunnel No. 1, the interconnections with City Tunnel No. 2
provided a level of redundancy. City Tunnel No. 3 provides a
level of redundancy to City Tunnel No. 1. It's basically a
backup plan, a secondary piece. The original siphons that were

underground, underwater subaqueous mains that fed from Bay

not use and to cutting back on industrial uses and that type of stuff. So it's just an increasing plan to be able to cope with the fact that you're not getting the replenishment of the upstate watershed water.

Q. Are droughts something that water managers such as yourself plan for?

[7] **A.** Absolutely.

Q. And why is that?A. Again, it would seem obvious to me that in order to be able

to always have a reliable supply, and it's something that's required by the State that regulates us. You need to have

these plans in place to deal with emergencies and to deal with

things like drought.

Q. Are water managers able to predict when droughts are going

to happen now?

A. They do a lot of statistics and probability based on rainfall data and we have climatologists and scientists who work on that end of the business. That's not my direct end of

the business. But there are probability curves the same way

they predict population and so on.

Q. So are droughts of the future something that the water planners in fact plan for?

[23] A. Absolutely.

MR. CHAPMAN: Could we see the next page, please?

Q. So that first level there says drought watch. And what is

[24]

[25]

VOLUME 2 August 4, 2009

want to do right.

(Continued next page)

[1]

121

[3]

[4]

151

f 61

[7]

[8]

[10]

F117

[13]

1141

[16]

[17]

[18]

[19]

[20]

[21]

1221

[23]

[24]

[25]

Page 356

A. Absolutely, all the time. I mean in simplest terms they're [1] building the facilities not only for us to run but in order to [2]

Page 358

Page 359

plug into the facilities that are currently operating, so [3]

they're building them to plug into the system that exists, so [4]

they need our input on a number of levels but certainly as to [5]

how to integrate them. 161

Q. Now, has the decision been made to construct Station 6? [7]

A. Yes. [8]

**Q.** And did you recommend that it be built? F91

[10] A. I recommended it, and a number of other engineers within

the agency have similarly recommended it. [11]

Q. Well, who made the decision for Station 6 to be built? [12]

A. That decision is the commissioner's decision. [13]

**Q.** And who is the commissioner now? [14]

A. Commissioner Lawitts. [15]

Q. Now, putting the availability of money aside, will Station 1161

[17] 6 be built?

A. Yes. [18]

Q. And do you have an estimate of approximately how long it 1191

would take to award the contract, design and build it? [20]

A. From the time you start the process it would be about four [21]

or five years for design and construction. 1221

**Q.** Now, assuming that Station 6 is built, will the City be [23]

using that water? [24]

A. Yes. [25]

Page 357

**Q.** What will it be using it for? [1]

[2]

A. For supply. I mean again to me it seems obvious to build

the station, to put the water into distribution would be the F33 [4]

intent.

We have already started -- I mean, you know, [5]

161 preliminary things like we just finished, or the Department of Design and Construction just finished for us construction of a [7]

trunk main, large diameter water main that fronts the property [8]

at Station 6 that was built for that purpose, to integrate, to [9]

be able to take the discharge out and augment, you know, [10] augment the supply in southeast Queens.

[11]

Q. So there are already mains that were just built to take the [12] supply from Station 6 and put it into the water supply? [13]

A. That's the reason that that trunk main was built. [14]

Q. And that's already in existence? [15]

A. Yes, sir. f161

[18]

[19]

[24]

1251

MR. CHAPMAN: I have no more questions, your Honor. [17]

THE COURT: All right. Thank you, Mr. Chapman.

Did you give the documents to Mr. Sacripanti?

MR. SACRIPANTI: Can we take our afternoon break and [20] then I could look at them? [21]

THE COURT: No, it's really too early. We just [22] reconvened at ten after two. [23]

MR. SACRIPANTI: That's true.

THE COURT: So, if will cross, we will have our break

#### BY MR. CHAPMAN:

Q. Now, does New York City currently have plans to build [2]

out, much more difficult to get the land to site some of the

facilities, so we have places where we can bring the water to

and political ramifications are a lot more complex now than

they were a century ago. They're just big projects that you

the surface. You need property to do that. The environmental

- treatment facility out at Station 6 in Jamaica, Queens? 131
- A. Yes, it does. [4]
- Q. What's the state of those plans right now? [5]
- A. Again, as I stated earlier, they're in what we would term [6]
- conceptual design, 10 percent design. I think they're used 171
- interchangeably. [8]
- **Q.** So what does that mean really? [9]
- A. Essentially what a 10 percent or conceptual design is is it [10]
- just lays the framework, the really high-level plan for what [11]
- would be involved, without getting down to the details of [12]
- everything that's involved. [13]
- Q. Would that be the next stage? [14]
- [15]
- Q. Do you know what the approximate cost of the Station 6
- treatment facility would be? 1171
- A. The design and construction I believe is 250 million [18]
- currently.
- Q. Now, do you know what bureau is responsible for the Station [20]
- 6 design and construction at this point? [21]
- A. One of the bureaus lateral to me, the Bureau of [22]
- Environmental Engineering, Design and Construction, BEDC. 1231
- **Q.** Do you collaborate with BEDC on issues of design and [24]
- construction? [25]

Page 368

THE COURT: So, rather than your documents, the documents you are looking at do they say that.

THE WITNESS: The document I am looking at says emergency plan on it.

MR. SACRIPANTI: Oh, in the last bullet point.

THE WITNESS: Yeah.

[5]

[6]

[7]

[8]

[19]

[20]

[21]

[22]

[23]

[24]

[25]

[1]

[2]

[3]

141

[6]

[9]

T101

[13]

[15]

[16]

[18]

[19]

[20]

MR. SACRIPANTI: So we agree?

THE COURT: What does that mean "so we agree"?

Q. It's emergency plan development plus the ability to take your system down, that's dependability?

A. I think what that says is that there is a major bullet there that identifies the ability to work on pieces of major infrastructure as a reason for dependability. I think there is

a bullet there that says that emergency plans are part of dependability.

Q. And you consider, I believe, in your deposition, the entire Queens groundwater as a dependable source. You called that dependability as well, did you not?

**MR. CHAPMAN:** Your Honor, may we have a page and line number if he is referring to a deposition?

MR. SACRIPANTI: Sure. It would be page 92, line 21 through page 94, line 5. And I can bring that up or I can show the witness. I'm happy to do that, bring it up.

THE COURT: Well, only if he asks.

MR. SACRIPANTI: Well, there was a -- OK, I will wait

it's part of the upper glacial aquifer, correct?

[2] A. The groundwater system as a whole is part of multiple

131 aquifers.

Q. Right. But Station 6, the wells at issue here are in the

upper glacial. Would you agree with that?

A. One of the wells is in the Lloyds.

Q. I said the wells that were at issue here.

A. Well, of the wells that revolve around Station 6, there is

one well in Station 6 that's in the Lloyds and the other is in

the upper glacial.

Q. And Station 6 and the wells in the upper glacial are part of dependability?

A. They are part of the groundwater system, yes.

[14] Q. OK.

Now, you are familiar with the upstate aquifers and the aqueducts that bring water down to the city, are you not?

[17] A. Yes.

Q. I mean you just spent a little time I believe at the

beginning of your testimony going through them. Am I right

1201 about that?

[24]

[25]

[21] A. I'm familiar with them.

1221 Q. OK. Let's, if we can, go to tab 5, and we will bring this

up. Just page 2.

Now, you have two branches essentially, right, one coming from the Catskills and one coming from Delaware?

Page 369

, ago (

for Mr. Chapman to read it.

THE COURT: Did you say page 92, Mr. Sacripanti?

MR. SACRIPANTI: 92, line 21.

MR. CHAPMAN: Maybe I have the wrong copy.

MR. CHAPMAN: You said page 92?

MR. SACRIPANTI: We can pull it up on the screen, your Honor. My notes may be wrong.

Honor. My notes may be wrong
THE COURT: OK. And you

**THE COURT:** OK. And you said line what? What line? **MR. CHAPMAN:** That's what I have, a reference to well

Q. "With regard to well 45, can you tell us whether or not this is a dependability well?"

The answer was, "Again, when you say is that a dependability well, I think the answer to that question is dependent upon your definition OF what dependability is. In my -- from my perspective, the entire groundwater system is a source that is available to us to use, and in that context a viable piece to go through to have a dependable back-up source or a dependable source of supply, whether it be back-up or otherwise."

[21] A. I'm totally comfortable with that statement.

Q. OK. And Station 6 is in the groundwater system in Queens,

and accordingly -- is that correct?

A. That's correct. Dependable doesn't mean available.

**Q.** No, I understand, but it's part of dependability, because

111 A. Two watersheds.

Q. Two watersheds, right?

[3] A. Three watersheds. You have the Croton system as well.

[4] Q. And the Delaware aqueduct is leaking at roundout west, am I

[5] correct?

A. Between the roundout reservoir and the west branch tunnel,

the tunnel that goes between those two reservoirs.

[8] Q. It's leaking some estimates are as high as 35 million

gallons a day, correct?

A. 30, 35 million, you know, on that order.

[11] Q. Right. And how long has DEP known about that leak, if you

[12] know?

[13] A. I don't know the specific date, but I know that it goes

[14] back a number of decades.

Q. And there are a number of fixes that have been advanced for

the leaky tunnel, am I correct?

[17] A. The fix to the leaking tunnel has not been advanced because

we don't know what the cause of the leak is. We don't know

[19] what the problem is to fix.

Q. Right. But in order to take that tunnel out, one of the

options is to build a parallel tunnel.

[22] A. That's an option that's under --

MR. CHAPMAN: Objection, your Honor. It's ambiguous.

Take it out? I don't know what it means. Turn it off?

[25] Replace it?

Page 371

1231

[3]

[4]

[5]

[6]

171

[8]

[9]

[10]

[11]

[12]

[13]

[14]

[15]

[16]

[17]

**F181** 

[1]

Page 372

THE COURT: Stop using it? What does "take it out" mean?

**MR. SACRIPANTI:** I can rephrase it, your Honor. And I was courteous during his direct.

**THE COURT:** No, but we have to clarify things. So does take it out mean stop using it? Is that what the phrase take it out means?

MR. SACRIPANTI: I will rephrase it, your Honor. THE WITNESS: I understand both distinctions. I think he means in order to be able to fix it.

Is that what you meant?

MR. SACRIPANTI: Yes. And I am happy to rephrase it. To take that tunnel out, to fix that tunnel --

**THE COURT:** You mean to take it out of service while you are fixing it?

MR. SACRIPANTI: Yes.

**THE COURT:** So let's say that. Take it out of service while you are fixing it. Go ahead.

Q. One of the options is to construct a parallel tunnel for redundancy?

A. That is an option that is currently under consideration.

Q. And in fact I believe on your direct testimony you talked

about a number of redundant tunnels that were built here in the city. Is that correct?

A. I think all of the tunnels are redundant to one another.

[4]

[13]

that we are using can be affected by anything at any point in time, so under normal circumstances it's a higher quality supply.

Page 374

Page 375

THE COURT: From Delaware.

A. From Delaware, but not always. There may be circumstances

where it may not be.

[7] Q. And did you not on your direct -- maybe I misheard you --

say that the water is the best water in the country?

[9] A. I believe so.

[110] Q. Right. But from time to time you have problems upstate with your water?

[12] A. There are concerns at times with turbidity.

THE COURT: With what?

THE WITNESS: Turbidity is basically the suspension of particles in the water.

Q. And your turbidity problems occur more often in your

[17] Catskill system, right?

[18] A. That's correct.

[19] Q. And in fact you have gotten -- when I say you, forgive me,

I mean the DEP or the City -- has gotten something called an

[21] FAD. And I will define it, and you agree with me if I'm

[22] correct, of course, it stands for a filtration avoidance

determination. Am I correct?

[24] A. That's correct.

Q. And you got that from EPA, correct? DEP got that from EPA?

Page 373

The in-city tunnels are redundant to one another in part.

[2] Q. Now, deputy commissioner, would you agree with me that one

of the missions DEP has is to supply the best quality water it

[4] can, correct?

[5] A. Yes.

161 Q. At the most effective cost that the City can supply it?

A. Cost is definitely part of the responsibility.

Q. Let me, if I can, go back to the upstate reservoir system we talked about a few moments ago.

WY------

We can agree, can we not, that the water coming from the upstate system is, I called it the champagne of water.
Would you disagree with that description?

Would you disagree with that description?

A. I would call it very good water; I wouldn't call it

the water from the Delaware is even of the highest quality of

[17] water?

[18] A. Yes.

[19] Q. Better than the Catskill water?

1201 A. Typically, but not all the time.

[21] **Q.** The Catskill not all the time?

[22] A. Not --

[24]

[23] Q. You have some turbidity --

THE COURT: One second, Mr. Sacripanti. Go ahead.

A. I think the quality of the water in any of the reservoirs

A. That's correct.

**Q.** It's very important to DEP, correct?

[3] A. Absolutely.

[1]

[2]

[4]

THE COURT: What is it?

THE WITNESS: Filtration avoidance, basically, your
Honor, filtration avoidance allows us to not have to filter the

supply. So, by the way in which we manage the watershed and

the surrounding properties and areas, and the quality of the

water, the EPA has given us a determination that we don't have

to filter that source.

[11] Q. And the department is quite proud of the filtration

1121 avoidance determination because you are one of the few

municipalities in the country that have it, correct?

[14] A. Yes.

Q. You have it because your water is pretty clean, correct?

[16] A. We have it because we do a good job managing the watershed.

1171 Q. Right. And you have spent hundreds -- and you again, DEP

has spent hundreds of millions of dollars in order to maintain

this FAD, correct?

[20] A. I think that's a fair characterization.

Q. OK. In fact your UV plant that you built in the Catskills

you built in order to keep your filtration avoidance

[23] determination, correct?

A. I'm not a hundred percent certain that those two things

are -- I believe that the UV plant -- I know that it responds

**VOLUME 2** August 4, 2009

Page 410

Page 408

[1]

[2]

MR. SACRIPANTI: I'm getting to it, your Honor. THE COURT: Mmm.

Q. When I showed you, and I'd like to go back to, if I can, to the PowerPoint presentation, that's in tab 2 --

THE COURT: Right.

Q. On page 13, it's on tab 2, David, I'm sorry.

THE COURT: That was the recommendation that said construct the 3rd Cat/Del aqueduct. Okay, he's got it.

- Q. I believe your answer was that recommendation is no more 191 valid than preliminary design? Is that correct? [10]
- A. I apologize. Could you just ask one more time? [11]
- Q. Sure. I'm sorry. I believe when I asked you about that [12]
- recommendation, your answer to me was that that recommendation [13]
- is no more valid than the preliminary design. [14]
- A. The way -- as I recollect the way you asked the question is [15]
- you asked me whether this statement recommendation was ever [16]
- attached to something with Station 6 and it sounds like you're 1171
- asking me a different question now. [18]
- Q. Okay. [19]

[1]

2]

131

[4]

[5]

161

[7]

[8]

- A. And that statement is one --[20]
- Q. I asked you --[21]
- A. -- is one bullet in the context of a PowerPoint [22]
- presentation that has other things that are discussed. And [23]
- clearly, it is a recommendation that Catskill/Delaware tunnel
- be built. That's clearly a recommendation. [25]

which are part of our ability to use the, take the water from the Croton watershed and pump it into the Delaware system.

And the last sub-bullet says, "Rehabilitate existing [3] groundwater system and construct Station 6 treatment plant for F43

groundwater." [5]

- Q. It says construct Station 6 for treatment of groundwater in [6] the same document Mr. Sacripanti was just asking you about, 171
- 181 correct?
- **A.** That appears to be the case. [9]
- Q. Now, sir, in an answer you gave Mr. Sacripanti, you said [10]
- Station 6 was not going to be built until the PCE problem could [11]
- be fixed. Were you referring to cleaning up the water for [12]
- every contaminant or just PCE? [13]
- A. For every contaminant, in order to be able to use it. [14]
- Q. And lastly, sir, in talking about this pharmaceutical [15]
- testing issue, is that something that you've heard is more of a f161
- concern for the upstate surface water system? [17]
- A. My understanding of the whole issue around pharmaceuticals, 1181
- number one, is that it's a very developing issue, the science [19]
- on it is not clear, to my understanding, and it was my clear [20]
- understanding from meetings that I was in that that was in the [21]
- context of the surface water, which would be the upstate [22]
- system. I've never heard of it spoken about in regard to the 1231
- groundwater system at all. [24]
- Q. Finally, my last subject, sir. You talked with [25]

Page 409

Page 411

- Q. Correct. And I asked you if you had seen or know of any [1] other similar recommendations for Station 6. 121
- A. I don't have a document that has -- I've never seen [3]
- something that says "recommendation" at the top, bullet, "build [4]
- Station 6." That doesn't mean there hasn't been a
- recommendation to build Station 6. 161
- MR. SACRIPANTI: I don't have any further questions, [7] your Honor. Thank you, Deputy Commissioner. [8]

THE COURT: Will there be any redirect?

MR. CHAPMAN: Just a couple of questions, your Honor.

THE COURT: If it's really a couple, let's do it.

REDIRECT EXAMINATION

#### BY MR. CHAPMAN: [13]

- Q. Mr. Roberts, in fact, in that same document on tab 2, if [14] you have the notebook in front of you that Mr. Sacripanti was 1151 asking you about, tab 2, page 11 --[16]
- A. I thought I was done with the glasses. [17]
- **Q.** This is D12181. [18]
  - THE COURT: He sees it. It says "hybrid approach."
- Q. It says "hybrid approach." Will you read that last line [20] for the jury? [21]
- A. The last major bullet says, "Construct or implement initial [22] baseline projects and ancillary benefits to mitigate risk of 231
- unplanned shutdown." And the third sub-bullet, well, it says, :4]
- "Conservation Cross River and Croton Falls pumping stations," [25]

- Mr. Sacripanti about the different costs of water, some water [1] costs more if it has to be pumped than other water that's [2]
- gravity. Correct? [3]
- A. That's correct. 141
- Q. When you discussed the issue of redundancy, does the cost [5]
- of water factor in on a redundant system when the primary [6]
- system goes down? 171
- A. Well, the cost of water becomes a real topic for debate [8]
- when you don't have any, and so what's the cost of the water if [9]
- you don't have it to supply? So while cost is clearly an issue f101
- that everybody needs to be concerned about day-to-day, our [11]
- requirement to have water and to be able to distribute it, [12]
- would supersede that cost. And this is an incremental cost in [13]
- the grand scheme of our overall operation. This is not as if [14]
- we're talking about a plant that's going to treat 1.1 billion. 1151 [16]
  - So it's an incremental cost.

MR. CHAPMAN: I have no more questions, your Honor.

RECROSS EXAMINATION [18]

#### BY MR. SACRIPANTI:

read the three slides?

[20] Q. Can we go to again, Commissioner, to tab 2 and the page I'm reading from is the page Mr. Chapman questioned you about. [21]

**THE COURT:** The one that says "hybrid approach." [22] Q. Could you take -- the Court will take a minute and just [23]

THE COURT: What three slides? What do you mean,

(39) Page 408 - Page 411 Min-U-Script®

[17]

[19]

F241

[25]

[9]

f101

[11]

[12]

[19]

## THE CITY OF NEW YORK, ET AL v. EXXON MOBIL CORPORATION, ET AL

VOLUME 3
August 5, 2009

TRIAL
SOUTHERN DISTRICT REPORTERS
500 PEARL STREET
NEW YORK., NY 10007
212-805-0300

Original File 985FCITF.txt, Pages 418-608 (191)

[1]

[2]

131

[4]

[5]

161

[7]

[8]

191

[10]

[11]

[12]

[13]

1141

[15]

[16]

1171

[18]

[19]

[20]

[21]

[1]

[2]

[6]

[7]

181

Page 518

we have one trunk main turned off, the other trunk mains will go back and feed the rest of the city. So that's sort of the overall concept of dependability.

When we are talking about this sort of smaller dependability program, that's really just focused on how to fix this one piece of infrastructure. That's sort of two different -- I'm almost sorry we used the same word, but they are really two different definitions. One is a smaller program, and one is a concept of how you run water utilities.

**Q.** And which part of dependability is Station 6?

A. Station 6 is part of the ongoing dependability program and has been determined to be necessary and very helpful should we take the Delaware down, but also helpful in a variety of other issues.

If we lost the Catskill aqueduct it would be helpful. If we lost -- and the Delaware aqueduct has the same name all the way down -- the Delaware aqueduct between two other reservoirs, which we haven't talked about until now, between West Brook and Kensico, the parallel aqueduct would be upstream of that, and the in-city ground water would help us mitigate that loss.

Q. Again, how long is the estimate to build the parallel

tunnel?

A. What I have been estimating is 17 years. I mean it could

definitely be longer than that. You would always hope that it

where the leaks are. Then I mentioned the Catskill aqueduct,

Page 520

Page 521

and also, you know, if there was something that happened to one

of the in-city water tunnels, it would be helpful to have groundwater.

I mean there are a variety of things that groundwater does that a tunnel doesn't do.

[7] Q. And I wanted to focus on those in-city tunnels.

[8] A. Sure.

1111

[12]

MR. BONGIORNO: May I approach?

THE COURT: You don't need to ask.

MR. BONGIORNO: Sorry. Thank you.

I don't think this is in your binder.

For the record D-12237. We actually have it on the screen. Thank you.

Q. Ms. Garcia, what I have handed you, Defendant's Exhibit 12237, New York City Water and Sewer System; a component of the

City of New York; Comprehensive Annual Financial Report for the

Fiscal Year July 1, 2007 to June 30, 2008.

[19] A. Yes.

Q. I trust you have seen it before?

A. Actually, no I haven't.

[22] Q. You have not. OK. New York City Water and Sewer System,

that's within the purview of the DEP, is it not?

[24] A. Yes, that is.

1251 Q. Let me direct your attention, please -- if you look in the

Page 519

[1]

[5]

[6]

[7]

[8]

[9]

[10]

[11]

would be shorter, but this would be a massive construction

project.

Q. And during that time there would be continuing risk of failure of the Delaware aqueduct, correct?

151 A. Yes, that's correct.

MR. CHAPMAN: I have no further questions, your Honor.

THE COURT: OK. Recross?

MR. BONGIORNO: Briefly, your Honor.

[9] RECROSS EXAMINATION

[10] BY MR. BONGIORNO:

1111 Q. Ms. Garcia, if I heard you correctly you just made

reference to two different types of dependability.

[13] A. Yes.

Q. And you lumped Station 6 into, if I got this right, the

ongoing dependability bucket?

A. Into the broader conceptual, like how you run a water

utility, that you want to have redundancy for any given piece

of infrastructure.

91 Q. And in that bucket of redundancy, you just mentioned two or

three other projects, right?

[21] A. Yes, I did.

Q. What were those again?

A. It would help on the Delaware aqueduct, it would help if

there was a failure of the Delaware -- a different section

between West Branch and Kensico, which is further south of

lower left-hand corner -- and I admit they are hard to see -- THE COURT: Sorry. Whose document is this?

THE COURT: Sorry. Whose document is this?

MR. BONGIORNO: It is a New York City document, your
Honor.

**THE COURT:** But she is not familiar with it; she hasn't seen it. I don't know who put it out.

MR. BONGIORNO: It's in evidence produced by the City. Who put it out? The City.

THE COURT: That all may be, but I am not sure this witness is the appropriate witness to question about a document she has ever seen. I'm sure it is the city, an entity. I'm

not questioning its admissibility. I'm just saying I don't know why you would ask her anything about it. She has never

seen this.

MR. BONGIORNO: I will just go to questions, your Honor.

1171 Q. You talked about the in-city tunnels moments ago, correct?

[18] A. Yes

**Q.** And those tunnels are named is it city tunnels 1 and 2, or

is it also city tunnel 3?

[21] **A.** And city tunnel 3.

Q. OK. And there is a stage 2 for those city tunnels that's

being built right now, correct?

[24] **A.** There is.

Q. And when stage 2 comes on-line DEP will have achieved full

Station 6? [1]

- A. I attended all the meetings. [2]
- Q. Can we see PL-64, please, which is tab 16. Do you know 133
- what PL-64 is? [4]
- A. Yes, that's should be the meeting minutes from the initial [5]
- community outreach meeting on November 27, 2001. 161
- Q. And do you recall who any of the other people were who were
- with you at that meeting? [8]
- A. Yes. At the time commissioner Joe Miele from the DEP was 191
- there. The deputy commissioner for the Bureau of Water and
- Sewer Operations, my boss, Doug Greeley. Members of Malcolm 1313
- Pirnie our consultant were there. Helen Neuhaus and several of [12]
- her coworkers were there. Helen Neuhaus I should say was the [13]
- community outreach consultant that we hired to help us reach [14]
- out to the community if you will. [15]
- I believe there were some members of the regulatory [16] bodies, the State Department of Environmental Conservation. [17]
- I'm not sure, there might have been people from the City
- [18] Department of Health. I'm not sure if there is anyone from the [19]
- State Department of Health. [20]
- Q. And there were members of the community there also?
- A. I think there were almost 200 people in attendance. There [22]
- were also some community activists, people from the community [23]
- boards who also attended. [24]
- Q. Were any representations made to the community at that [25]

such as the dry cleaning fluid and the MTBE and such, but we [1] needed to look at the technologies for the iron removal and the [2] hardness. [3]

Page 544

- [4] And one of our constraints, why we were looking at some of these technologies, is because although Station 6, as I [5] said, was a big piece of property, it did have its limitations; 161
- and various types of processes have various area demands on 171
- them, so we needed to look into those. [8]
- Q. Was a pilot plant built at Station 6? [9]
- A. A pilot plant was built at Station 6 on the northern piece 1301
- [11] of property where Station 6 and 6D were.
- [12] Q. Were any of the redrilled wells activated? Did they pump
- water in connection with the pilot plant? 1131
- A. Yes, they were. [14]
- Q. Do you remember which wells were pumped? [15]
- A. We primarily pumped 6B, but later on in the process, later [16]
- on in the pilot study -- which lasted about 13 months -- we [17]
- [18] were also pumping some of the other wells.
- Q. And during what period of time was the pilot project 1191
- running?
- A. I believe the pilot ran from January of 2002 to February of [21]
- 2003. [22]
- Q. Now, was the water quality tested during the time that that [23]
- pilot plant was operating? [24]
- A. Constantly, yes. [25]

Page 543

- 111 Q. Constantly you said?
  - A. Yes, constantly. Yes. [2]
  - Q. Do you recall whether any VOCs, volatile organic compounds, [3]
  - were detected in the water? [4]
  - A. Yes, I do. [5]
  - Q. Which ones were detected? [6]
  - A. PCE, which is dry cleaning fluid -- Perchloroethylene -f71
  - but dry cleaning fluid and MTBE. [8]
  - Q. Do you recall the highest level of MTBE that was detected [9]
  - in any of the wells at Station 6? [10]
  - [11] A. Yes. In well 6D, which was the most northern well, there were 350 parts per billion detected. 1121

  - Q. Could we see PL-105, please, which is tab 5. And could you [13]
  - tell us what that document is. [34]
  - A. Yes, that's the summary report of the outcome of the pilot [15]
  - study. [16]
  - Q. And that's dated October of '03? [17]
  - [18]
  - Q. Next page, please. So that talks about a pilot plant was [19]
  - built to test several proposed treatment alternatives. Is that [20]
  - [21]
  - A. That's correct. [22]
  - Q. And the pilot plant effort lasted over 16 months but 1231
  - construction started in October of 2001 and operation 1241
  - commencing in early February 2002, and continuing until [25]

meeting about the quality of the water to be provided by

- Station 6? [2]
- A. Yes. 131
- Q. What were those representations?
- A. You just want the exact wording? Basically the 151
- commissioner advised the community that we could provide them [6]
- with high quality drinking water utilizing the groundwater [7]
- system. [8]

1181

[19]

[20]

1211

[22]

1231

[25]

- Q. Were you ever involved in discussions about a pilot plant 191
- at Station 6?
- A. Yes, I was. [11]
- Q. What was the idea for the pilot plant? [12]
- A. The pilot plant was going to test the technologies that we [13] would utilize when we build Station 6. As I previously said, [14]
- we had to redrill -- we had to redrill the wells at Station 6 [15]
- in order to run them, in order to see what levels of impurities we had in them and what types they were. (17)
  - We already knew we had iron, but we needed to find out what level of iron we had. We knew we had iron issues, but we had to find out how high a level of iron we had. We had to find out any other contaminants that might have been there.
  - The prime objective of the pilot plant, we were going to look at the technologies to remove iron and manganese and to remove the hardness. There are already technologies that are well documented on how to remove the organic volatile chemicals

Page 545

## THE CITY OF NEW YORK, ET AL v. EXXON MOBIL CORPORATION, ET AL

*VOLUME 4 August 6, 2009* 

TRIAL
SOUTHERN DISTRICT REPORTERS
500 PEARL STREET
NEW YORK., NY 10007
212-805-0300

Original File 9867CITF.txt, Pages 609-769 (161)

		Page 609		Page 611
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [20] [21] [22] [23] [24] [25]	9867CIT1 UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK THE CITY OF NEW YORK, et al,  Plaintiffs,  V-  EXXON MOBIL CORPORATION, et al, Defendants.	District Judge	[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25]	prioritization.  Q. When did you start that job?  A. I started that this year, February of this year.  Q. How long have you been with the DEP?  A. I have been with the DEP for 22 years.  Q. And what was your job prior to your current one?  A. I was chief of another division called dependability and risk assessment.  Q. And what were your responsibilities as chief of the DRA?  A. The division was in charge of facilities improvement, dependability being a program that the DEP is involved in right now to look at our water supply system and make it dependable for the next 50 to 100 years. Probably not a good explanation.  We have lots of facilities in our water supply system that are getting aged, they are aged and they need inspection and repair. At the moment we cannot do that fully, we cannot look at every infrastructure. We would like to do that. So, my role as chief, and with my engineers, was to find out what needs to be repaired and develop ways, projects of inspecting and repairing these infrastructures.  Q. As chief of the division of dependability and risk assessment, do you have any responsibility in connection with Station 6?  A. Station 6 was transferred over to my division near the end of the facility planning, which is also known as 10 percent
		Page 610		Page 612
[1] [2] [3] [4]	(Trial resumed) (Jury present)  THE COURT: We got a late started couple jurors were late. We want you to kn here.		[1] [2] [3] [4] [5]	design. So, yes, Station 6 was given to my division, so, yes, my old division is responsible for that job now.  Q. And you were responsible for it when you were chief, is that correct?  A. Yes, I was.
[6]	WILLIAM MEAKIN,		[6]	Q. Is the DEP committed to designing and building Station 6?

- [7] called as a witness by the plaintiff, having been duly sworn, testified as follows: [8] THE COURT: Please state your full name for the [9] record, spelling both your first and last name. [10] THE WITNESS: William Ashley Thomas Meakin, [11] W-i-l-l-i-a-m, M-e-a-k-i-n. [12] THE COURT: Thank you.
- [13]
- DIRECT EXAMINATION [14]
- BY MR. CHAPMAN: [15]
- O. Mr. Meakin, good morning. [16]
- Good morning. [17]
- Where are you currently employed? [18]
- A. I'm employed New York City Department of Environmental [19]
- [20]
- [21] Q. Are you a licensed engineer?
- A. Yes, I am a licensed engineer for the State of New York. [22]
- Sorry. New York State. 23]
- Q. What is your current position with the DEP? 24]
- A. My current position is chief of capital planning and [25]

- A. Yes, we are. [7]
- Q. From your standpoint as chief of the DRA, why hasn't
- Station 6 been built yet? [9]
- **A.** Money, the funding. [10]
- Q. Any other reason? [11]
- A. No. Funding. [12]
- Q. And from the standpoint of the chief of the DRA what is the [13]
- purpose of Station 6? [14]
- A. Station 6 is to deliver water quality -- good water F153
- quality, Cat/Del water quality to our water distribution [16]
- system. [17]
- Q. Have you heard the term baseline project? [18]
- A. Yes, I have. [19]
- **Q.** What is a baseline project? 1201
- A. Under dependability, when we were looking at all the other [21]
- projects that we would need to be developed to allow us to [22]
- address the infrastructure we would like to take off line for [23]
- inspection and repair, there were certain projects already in [24]
- our system that the City of New York said we were going to go [25]

- A. Yes, it's a commitment for design and construction. [1]
- Q. Design and construction. But your commitment for the 2]
- parallel tunnel, you said, is only for investigation? Correct? [3]
- That's what you told me. [4]
- A. Correct. [5]
- Q. You said there's no commitment yet for construction. [6]
- F73
- A. That's correct. [8]
- Q. Now, that commitment to construct Station 6, I think your [9]
- counsel showed you today some executive budgets of the mayor [10]
- for the City of New York?
- A. That's correct. 1121
- Q. And you said that's where the commitment to build Station 6 [13]
- is embodied, correct? [14]
- A. Correct. [15]
- MR. BONGIORNO: Dave, could you pull up PL 164? It's [16]
- your exhibit, Plaintiff's 164. I'm sorry, it's in your [17]
- binders, not mine. f181
- Q. Commissioner Lawitts, do you see City of New York capital [19]
- commitment plan executive budget fiscal year 2010? It's dated [20]
- May 9, 2009, correct? 1211
- A. It's dated May, 2009, but otherwise correct, sir. [22]
- Q. Sorry, May, 2009, fiscal year 2010, correct? [23]
- A. Yes. 1241

[1]

[2]

[3]

[6]

[7]

[8]

[9]

Q. I think your counsel showed you the fiscal year budgets for

A. Correct.

[1]

MR. BONGIORNO: Dave, can you go one page before? If 121 you can go back -- we'll stick with the screen. [3]

- Q. The bottom column or section says Delaware Rondout [4]
- aqueduct, parallel tunnel. Now, that's also in this executive [5]
- budget, correct? 161
- [7] A. Correct.
- Q. And there are commencement dates, not too much different 181
- than Station 6, I see 6/14, I see 6/15. In fact, they are the [9]
- same dates, and I see huge sums of money. 148 million, a few [10]
- lines down, 100 million, 366 million, 491 million. And those [11]
- are all next to the word "construction," correct? [12]
- A. That's correct. [13]
- Q. So the parallel tunnel is in this budget a commitment to [14]
- construct, correct? [15]
- A. It is in the budget, yes. [16]
- Q. And that's a commitment to construct, correct? [17]
- A. Based upon the outcome of the first line item in there, the [18]
- 30.5 million in preliminary design. 1191
- Q. Does it say that anywhere in this budget? Does it? Does [20]
- it say that anywhere? [21]
- A. There are no qualifying statements on any project, sir. [22]
- Q. And the word that you're suggesting is a qualification is [23]
- the word "design"? Is that what you're saying? [24]
- A. I'm sorry, I didn't understand the question. [25]

Page 706

Page 708

- '08 and 09, so this is the next one, 010, and again you say Station 6 commitment is embodied in these budgets.
  - MR. BONGIORNO: Dave, could you pull that up? MR. CHAPMAN: Your Honor, he's testifying. That's not
- what the witness said. 151
  - MR. BONGIORNO: Pull that down, please.
  - Q. I'm sorry, maybe I misunderstood, Commissioner Lawitts. 1 thought you said, in fact, we can go check it, about 30 seconds ago, that the commitment to construct Station 6 is embodied in the capital commitment plans of the mayor. That's what you
- F101 said, correct? [11]
- THE COURT: Well let's find out from the witness, [12] Mr. Chapman. Did you say that? [13]
- THE WITNESS: I believe I said words to that effect, 1141 your Honor. [15]
- MR. BONGIORNO: I got one right. Excellent. Can we 1161 get that back up, Dave? [17]
- **Q.** And if we go to that section for Station 6, we see some [18] numbers and we see, so the record is clear, the plan [19]
- commencement date column, we see 6/13, 6/14 and 6/15, that's a [20]
- representation as to when the work is supposed to start, [21] correct?
- [22]
- A. Correct.
- Q. We'll come back to that in a moment. But that's the 44]
- embodiment of the commitment right there, is it not? [25]

- Q. Okay. We agreed that there's no qualification in this [1] budget, right? [2]
- A. Correct. 131
- Q. And moments ago you told me there's no commitment to build 141
- the third parallel tunnel, correct? [5] [6]
- MR. CHAPMAN: Objection, your Honor. The third parallel tunnel. I don't know what that is. [7]
- Q. Well, I bet you he does, but it's the Rondout West Branch [8] parallel tunnel. [9]
- A. I indicated that it was dependent on the outcome of the [10] facility plan. [11]
- Q. And this budget indicates that it's not dependent on [12]
- anything, correct? [13] A. We wanted to reserve monies for construction in the event [14]
- that the facility plan leads us to advance design and [15] ultimately to construction. F1.61
- MR. BONGIORNO: Could I have my question read back, [17] please? [18]
- THE COURT: Maybe you're misunderstanding the word [19] budget, Mr. Bongiorno. What is a budget? [20]
- THE WITNESS: Your Honor, a budget is our plan. [21] THE COURT: It's a projection of expenses, right? You [22] project --[23]
  - THE WITNESS: Right.
- THE COURT: Expenses in a budget. [25]

TRIAL Min-U-Script® (25) Page 705 - Page 708

[24]

Page 707

## THE CITY OF NEW YORK, ET AL v. EXXON MOBIL CORPORATION, ET AL

VOLUME 5 August 7, 2009

TRIAL
SOUTHERN DISTRICT REPORTERS
500 PEARL STREET
NEW YORK., NY 10007
212-805-0300

Original File 987FCITF.txt, Pages 770-899 (130)

- A. Yes, I have. [1]
- Q. The design for the treatment plant at Station 6 will remove [2]
- PCE from the water, won't it?
- A. Yes, it will. [4]
- Q. So to the extent there is any PCE in the water at Station [5]
- 6, that would be removed in connection with the treatment.
- [7]
- Q. Just like any other contaminants will be removed, correct? [8]
- A. That's correct. [9]
- Q. Things like, if there was freon or MTBE, they would all be F1.01
- removed before the water served the public, correct? [11]
- A. Absolutely. [12]
- Q. Mr. Sacripanti also said in his opening that the upper [13]
- [14] glacial aquifer is a cesspool that is filled with raw sewage.
- Is that a correct characterization of the upper glacial [15]
- [16]
- A. I certainly wouldn't characterize it that way, no. [17]
- **Q.** How would you characterize it, sir? [18]
- A. It is a valuable resource for the City of New York. There [19]
- are some very -- the upper glacial is a very productive [20]
- aquifer, it yields a lot of water. There certainly are places [21]
- within the aquifer where contamination exists and we have to [22]
- deal with that in terms of water treatment issues. There's [23]
- also a lot of naturally occurring metals in the ground, like [24]
- the iron and manganese, for example, that will be part of the [25]

- and discharged out to Jamaica Bay, for example, in the area of [1]
- Station 6. The City also has a wide array of catch basins 121
- beneath the street that are designed to hold that water. [3]
- because in a huge storm event, you can get a big surge of water [4]
- that could overwhelm the sewer systems, so they've designed 151
- [6] these thousands of infiltration stations below the street to
- hold the water and let it flow back slowly into the ground. [7]
- Q. What happens from a hydrological standpoint when that water [8]
- sinks back into the ground? Is it cleaned in any way [9]
- naturally? [10]
- A. Going through the upper parts of the sandy soil and the [11]
- upper part of the aquifer does help to filter a bit, but it [12]
- eventually ends up as recharge to the aquifer. [13]
- [14] Q. Are you familiar with any water testing that was done in
- the upper glacial aquifer around Station 6? [15]
- A. Yes, I am. 1161

[20]

[25]

[1]

[2]

- [17] **Q.** And that has identified some contaminants?
- MR. SACRIPANTI: Could we just fix a point in time, [18] your Honor? f191
  - THE COURT: Yes.
- Q. Say, since the advent of the Station 6 pilot testing plant. [21]
- **A.** Yes, I am familiar with that. [22]
- THE COURT: We're trying to set a time frame. What [23]
- years are we talking about? [24]
  - THE WITNESS: The pilot testing took place in 2002 and

Page 791

Page 793

Page 792

- treatment system at Station 6. Those are naturally occurring elements in the water. But it's a good aquifer, yields a lot
- of water and it's a very valuable resource for the City of New 131
- York. [4]

[1]

[2]

- **Q.** And Station 6 is designed to clean up any of the [5]
- contaminants to make it good water for drinking, correct? [6]
- **A.** That is correct, yes. [7]
- Q. Now, sir, is there a difference between what people call [8]
- sewage that is the runoff from the streets, for example, and [9]
- sewage that comes out of people's homes? [10]
- A. Yes, there's a very big difference. [11]
- **Q.** What's the difference? [12]
- A. Well, in the first case, you asked about the water that [13]
- runs on the street after a big rain event. That's really storm [14]
- water runoff, as opposed to sewage, which is carried out of 1151
- people's homes in the pipes that has to go, is considered a [16]
- sanitary flow that has to go through a wastewater treatment [17]
- [18]
- Q. What happens to that storm water, for example, out in the [19]
- area in Queens where Station 6 is? [20]
- catch basins, the metal grates that are along the curb areas in [22]
- off the street. It's conveyed in a couple of different ways. [24]
- A. Storm water as it runs down the street goes -- you've seen [21]
- the streets, they're designed to catch that storm water, get it [23]
- Mainly gets conveyed through pipes, through storm water pipes [25]

- 2003. Malcolm Pirnie has done groundwater sampling and analysis going back to really almost the inception of the
- project, but certainly since say the late 1990s, '98 or so [3]
- through the more recent years. [4]
- Q. Now, when water is tested and sewage, say, from a home is [5]
- detected, what results are shown in the water test? For [6]
- example, is that a biological result? 171
- A. There are a number of indicators of sewage. Certainly the [8]
- first one that people look for is called coliform bacteria, [9]
- it's bacteria that's typically associated with waste products. [10]
- Q. In your review of the water of the upper glacial aquifer r111
- around Station 6, was there much detection of bacteria such as [12]
- that? [13]
- A. No, there was not. [14]
- **Q.** And that indicates what to you? [15]
- A. Well, that if someone were saying it was raw sewage in the [16]
- water, we had not seen the indication of that. [17]
- Q. So the test results didn't back that up, right? [18]
- A. That would be correct. [19]
- Q. And in any event, the treatment plant at Station 6, again, f201
- is designed to treat anything like that, correct? [21]
- A. Yes. Yes. [22]
- Q. Now, sir, you discussed with Mr. Sacripanti in his exam [23]
- [24] that at one point something like oil was discovered at one
- point at one of the Station 6 wells, correct?

Page 790 - Page 793 (6) Min-U-Script® TRIAL